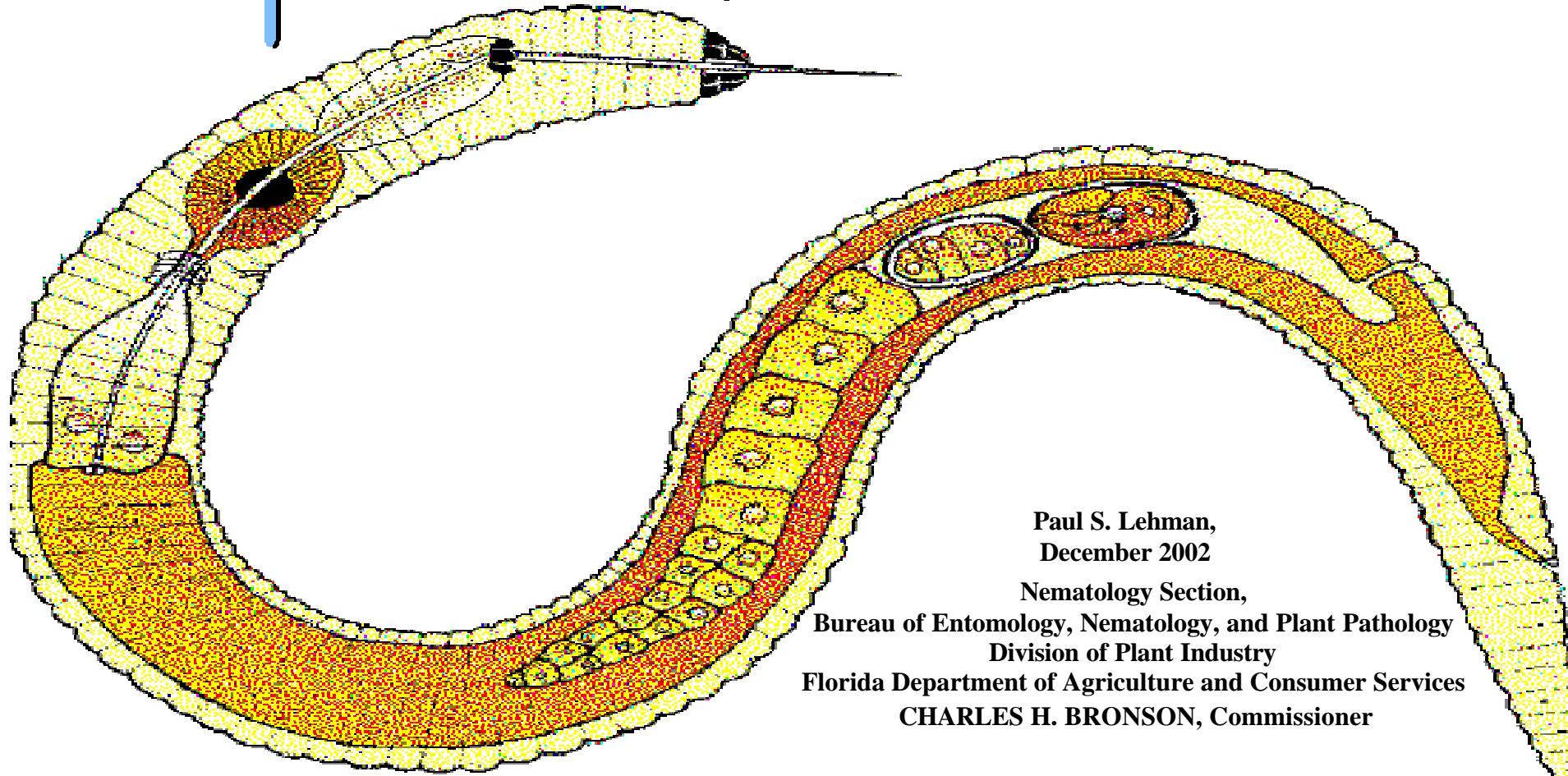


Phytoparasitic Nematodes reported from Florida



Paul S. Lehman,
December 2002
Nematology Section,
Bureau of Entomology, Nematology, and Plant Pathology
Division of Plant Industry
Florida Department of Agriculture and Consumer Services
CHARLES H. BRONSON, Commissioner

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

BASED ON THE DPI NEMATOLOGY SECTION'S RECORDS (1955-2002) AND
TAXONOMIC DESCRIPTIONS OF NEMATODES FROM FLORIDA (1888-2002)

Paul Lehman

Nematology Section, Bureau of Entomology, Nematology, and Plant Pathology
Division of Plant Industry, Florida Department of Agriculture and Consumer Services
December 2002

Introduction:

As a formal entity, regulatory nematology in Florida began in February 1955 when the State Plant Board appointed a world-renowned nematologist, Dr. B. G. Chitwood, to organize and direct a nematology program. This was in response to the discovery in 1953 that a severe disease of citrus, known as spreading decline, was caused by the burrowing nematode, *Radopholus similis*. In January 1961, the regulatory responsibilities of the State Plant Board were reorganized under the Florida Department of Agriculture and Consumer Services and during the numerous reorganizations the nematology unit became a part of the Division of Plant Industry as the Bureau of Nematology and more recently as the Nematology Section.

Since 1955, the Nematology Section has accumulated more than a half million records from the analyses of soil and root samples. The number of samples that the Nematology Section receives annually has steadily increased during the years, as indicated by the fact that approximately one half of the records are from the first 31 years, 1955 to 1986. Over the past 16 years an equal number of records have been added to the Nematology Section's files. In recent years, the annual number of samples that the Nematology Section receives has increased to an average of 18,000. This increase reflects the rapid growth of Florida's ornamental industry and its growing demand for nematode certification that is required for this billion-dollar industry to market plants nationally and internationally. Currently, about 75% of the samples that the Nematology Section receives annually are submitted to certify that Florida's ornamental nurseries are free of nematodes that are of regulatory concern to other states and countries. Another 10% of the samples relate to citrus nursery certification programs, which assure that the citrus seedlings purchased by commercial growers are free of damaging nematodes. Because citrus is a perennial crop with production normally spanning many decades, the cost benefits from these certification programs that have been in effect for the past 45 years have had cumulative annual benefits for Florida's citrus growers. The annual cost benefit from these certification programs that exclude damaging nematodes from nurseries and groves is approximately 50 million dollars. The balance of the samples received, approximately 15%, are diagnostic samples for plant problems and surveys to determine the distribution of phytoparasitic nematodes in Florida and detect introductions of exotic nematodes.

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

The accumulation of 588,699 nematode sample records has created difficulty in keeping an accurate list of nematodes that have been identified from Florida. This was especially the true after 1990 when reports were entered into a computer database and filing by nematode name and host was discontinued. The present project began in 1993 when we prepared a list of nematode names used in reports in our files from 1955 to 1990 and then devised a system to indicate if a new nematode name was entered into the computer database when reports were typed. A master list was prepared from these two sources in 2002. This list contained a total of 535 scientific nematode names that have been used in reports since 1955. Records for each nematode on the list were verified. In some cases, names were removed from the list because samples originated in other states and countries.

Because there have been numerous changes in the classification of phytoparasitic nematodes through the years, especially in the Criconematids, it is not surprising that many names listed in past records are now considered synonyms of another current valid nematode name. Although scientists do not always agree as to what constitutes valid nomenclature, in order to communicate what taxonomic entity is represented when a scientific name is used, it is important to list the sources that were used to determine valid nomenclature for distribution lists. For this project the following references were used to prepare the list of phytoparasitic nematodes reported in Florida:

- Brzeski, M. W., P. A. A. Loof and Y. E. Choi. 2002. Compendium of the genus *Mesocriconema* Andrassy, 1965 (Nematoda: Criconematidae) *Nematology* 4: 341-360.
- Brzeski M. W., Y. E. Choi, and P. A. A. Loof. 2002. Compendium of the genus *Criconemoides* Taylor, 1936 (Nematoda: Criconematidae). *Nematology* 4: 325-339.
- Hunt, D. J. 1993. Aphelenchida, Longidoridae and Trichodoridae: Their systematics and bionomics. International Institute of Parasitology, CAB International, St. Albans, UK. 352 p.
- Siddiqi, M. R. 2000. Tylenchida parasites of plants and insects. (2nd edition). CAB International, Wallingford, UK. 833 p.

Hunt's publication was used as the nomenclatural source for Aphelenchida, Longidoridae, and Trichodoridae. Siddiqi (2000) was the principal source for the Tylenchida, except that the 2002 publications by Brzeski *et al.* were used as nomenclatural sources for the genera *Criconemoides* and *Mesocriconema*.

Based on the Nematology Section's records from 1955 to December 31, 2002 and 42 taxonomic descriptions of phytoparasitic nematodes from Florida (1888-2002), there are at least 372 nematode species in 56 genera that have been reported in Florida. Credit is due to Dr. Robert P. Esser, who identified the majority of the new nematode species listed in the Nematology Section's records. During his 44 years of employment, he conducted numerous surveys, and he has been the major contributor to our knowledge of nematode distribution and biodiversity in Florida.

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

A number of records listed in the table are of historical interest. The earliest record listed in the table is from Dr. J. C. Neal's taxonomic description of the peanut root-knot nematode, which he described in 1889 as *Anguillula arenaria* and which today is known as *Meloidogyne arenaria*. Historically, this is not only the first taxonomic description of a phytoparasitic nematode from Florida, but also the first from North America. Several other renowned nematologists at the United States Department of Agriculture made other historically interesting contributions to the knowledge of Florida's nematode fauna. In 1914, Nathan A. Cobb, who is considered by many as the father of nematology in America, described *Dolichodorus heterocephalus* from Silver Springs, Florida. In 1942, the Soil Science Society of Florida sponsored the first comprehensive symposium on "Nematode Control under Florida Conditions". Dr. Gotthold Steiner, who replaced Dr. Cobb at the USDA, was the invited guest speaker at the symposium where he presented his classic paper entitled "Plant Nematodes the Grower Should Know" in which he described several new species from Florida including a new genus with the type species *Belonolaimus gracilis*. Even though he first reported these species in 1942, the date given in the taxonomic literature is 1949, because the proceedings of the society were not published until seven years after the scientific meeting.

Although the list of nematodes reported in the table below from the Nematology Section's records and taxonomic descriptions of phytoparasitic nematodes from Florida includes most of the nematodes identified from Florida, a more comprehensive list requires supplementary data from other Florida nematologists.

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
189E	<i>Afenestrata koreana</i> Vovlas, Lamberti & Choo, 1992	N97-00945	9/2/1997	Hernando
120C	<i>Allotrichodorus loofi</i> Rashid, de Waele & Coomans, 1985	N96-01314	12/ 9/1996	Alachua
120G	<i>Allotrichodorus sharmai</i> Rashid, de Waele & Coomans, 1985	N96-00292	3/11/1996	Pinellas
40C	<i>Aorolaimus leipogrammus</i> Sher, 1963	O. Description	4/11/1963	Baker
2B	<i>Aphelenchoides besseyi</i> Christie, 1942	G-0453	1/28/1957	Bradford
2A	<i>Aphelenchoides fragariae</i> (Ritzema-Bos, 1890) Christie, 1932	N-0909	2/24/1960	Orange
2C	<i>Aphelenchoides ritzemabosi</i> (Schwartz, 1911) Steiner & Buhrer, 1932	A-0119	9/ 9/1954	Polk
2E	<i>Aphelenchoides subtenuis</i> (Cobb, 1926) Steiner & Buhrer, 1932	A-0068	7/ 7/1932	Duval
3D	<i>Belonolaimus euthychilus</i> Rau, 1963	O. Description	12/12/1958	Marion
3B	<i>Belonolaimus gracilis</i> Steiner, 1949	O. Description	1942, see DPI library	Marion
3A	<i>Belonolaimus longicaudatus</i> Rau, 1958	O. Description	5/21/1957	Seminole
3E	<i>Belonolaimus maritimus</i> Rau, 1963	O. Description	12/16/1958	Volusia
216Q	<i>Bitylenchus dubius</i> (Butschli, 1873) Filipjev, 1934	H-0147	3/17/1958	Alachua
127CC	<i>Bursaphelenchus xylophilus</i> (Steiner & Buhrer, 1934) Nickle, 1970	E-5955	11/4/1981	Putman
4B	<i>Cacopaurus pestis</i> (Thorne, 1943)	N88-01418	7/27/1988	Columbia

¹ Numbers in the codes designate a genus and the letters a species. A list of codes is available at the Division o f Plant Industry: Esser, R. P. 1991. A computer ready checklist of the genera and species of phytoparasitic nematodes, including a list of mnemonically coded subject categories. Bulletin 13. Florida Department of Agriculture & Consumer Services, Division of Plant Industry, Gainesville, FL. 185 p.

² Highlighted records indicate that scientific name used for the nematode in the original record is different from the current valid name used in the table.

³ A unique accession number is assigned to each sample when it enters the nematology laboratory and serves as reference to trace a sample's identity.

⁴ The date listed is when the report for a sample was typed. For original descriptions, it is the date when the scientific article was published or if it was listed by the author, it is the date the sample with the new nematode species was collected.

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
123A	Cactodera amaranthi (Stoyanov, 1972) Krall & Krall, 1978	O. Description	1957 (see JON 9:101)	Seminole
123D	Cactodera cacti (Filipjev, Schuurmans Stekhoven, 1941) Krall & Krall, 1978	N90-00231	1/30/1990	Broward
123G	Cactodera weissi (Steiner, 1949) Krall & Krall, 1978	N90-00227	2/ 1/1990	Putman
37A	Caloosia longicaudata (Loos, 1948) Siddiqi & Goodey, 1964	N85-00191	2/ 6/1985	Taylor
37C	Caloosia paxi Mathur, Khan, Nand & Prasad, 1969	N95-01407	8/29/1995	Hillsborough
5CL	Criconema (Nothocriconemella) calvum (Raski & Golden, 1966) Raski & Luc, 1985	N96-00150	3/15/1996	Alachua
5BO	Criconema (Criconema) crotaloides (Cobb, 1924) Schuurmans Stekhoven & Teunissen, 1938	N93-01451	11/10/1993	Alachua
5CR	Criconema (Criconema) dorgeski (Darekar & Khan, 1982) Raski & Luc, 1985	N98-01105	11/10/1998	Alachua
5FL	Criconema featherensis (Al Banna and Gardner, 1993) Brzeski, Choi, & Loof, 2002	N98-01077	11/ 6/1998	Alachua
5DA	Criconema (Criconema) lamellatum (Raski & Golden, 1966) Raski & Luc, 1985	N94-00279	02/24/1994	Alachua
5KK	Criconema (Nothocriconemella) longulum Gunhold, 1953	N96-01414	11/19/1996	Alachua
5DC	Criconema (Criconema) loofi (De Grisse, 1967) Raski & Luc, 1985	N97-00039	1/27/1997	Taylor
5DI	Criconema (Nothocriconemella) mutable (Taylor, 1936) Raski & Luc, 1985	F-0466	1/26/1956	Orange
5DK	Criconema (Criconema) neoaxeste (Jairajpuri & Siddiqi, 1963) Raski & Luc, 1985	D-9064	6/21/1978	Orange
5DL	Criconema (Nothocriconemella) neopacificum (Mehta, Raski & Valenzuela, 1982) Raski & Luc, 1985	N96-01370	11/ 8/1996	Alachua
5DN	Criconema (Nothocriconemella) pacificum (Andrassy, 1965) Raski & Luc 1985	B-6974	10/22/1970	Gadsden
5DQ	Criconema (Nothocriconemella) paraguayensis (Andrassy, 1968) Raski & Luc, 1985	N93-01457	11/10/1993	Alachua
5DU	Criconema (Nothocriconemella) permistum (Raski & Golden, 1966) Raski & Luc, 1985	B-6524	6/ 3/1970	Lake
5CZ	Criconema (Criconema) shepherdae (Jairajpuri & Southey, 1984) Raski & Luc, 1985	N98-00809	8/28/1998	Alachua
5AO	Criconema (Nothocriconemella) sphagni Micoletzky, 1925	N97-01131	10/29/1997	Alachua
6I	Criconemoides annulatus Cobb in Taylor, 1936	N-0906	2/26/1960	Jefferson
6EW	Criconemoides hawangiensis (Choi & Geraert, 1995) Siddiqi 2000	F-0044	6/ 3/1955	Jefferson
6E	Criconemoides informis (Micoletzky, 1922) Taylor, 1936	N-00523	12/ 3/1959	Marion
6R	Criconemoides komabeensis (Imamura, 1931) Taylor, 1936	F-0044	6/ 3/1955	Jefferson

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
6BI	<i>Criconemoides mongolensis</i> Andrassy, 1964	E-0594	5/17/1979	Manatee
6T	<i>Criconemoides morgensis</i> (Hofmanner & Menzel, 1914) Taylor, 1936	N98-01040	11/10/1998	Alachua
79J	<i>Crossonema civellae</i> (Steiner 1949) Mehta & Raski, 1971	N-06614	8/ 5/1965	Hillsborough
79D	<i>Crossonema fimbriatum</i> (Cobb in Taylor, 1936) Mehta & Raski, 1971	D-01570	1/22/1975	Taylor
79F	<i>Crossonema menzeli</i> (Stefanski, 1924) Mehta & Raski, 1971	B-9949	7/26/1973	Dade
79G	<i>Crossonema multisquamatum</i> (Kirjanova, 1948) Mehta & Raski, 1971	N96-00060	2/5/1997	Alachua
79UU	<i>Crossonema nepalense</i> (E. Khan, M. Singh, and M. Lal, 1998) Siddiqi, 2000	N98-01389	2/ 3/1999	Alachua
79I	<i>Crossonema taylori</i> (Jairapuri, 1964) Mehta & Raski, 1971	D-8879	6/ 6/1978	Alachua
50T	<i>Discocriconemella degrissei</i> Loof & Sharma, 1980	N97-00981	9/10/1997	Polk
50A	<i>Discocriconemella limitanea</i> (Luc, 1959) DeGrisse & Loof, 1965	E-1392	10/18/1979	Lake
50B	<i>Discocriconemella mauritiensis</i> (Williams, 1960) De Grisse & Loof, 1965	D-4598	6/ 8/1976	Marion
50Y	<i>Discocriconemella morelensis</i> Cid del Prado, Vera & Loof, 1984	N96-01497	12/12/1996	Alachua
8T	<i>Dolichodorus aquaticus</i> Doucet, 1986	N87-01592	9/10/1987	Manatee
8R	<i>Dolichodorus grandaspicatus</i> Robbins, 1982	N97-00519	3/20/1998	St. Johns
8A	<i>Dolichodorus heterocephalus</i> Cobb, 1914	O. Description	1914	Marion
8Q	<i>Dolichodorus marylandicus</i> Lewis & Golden, 1981	E-6104	11/16/1981	Washington
8S	<i>Dolichodorus miradvulvus</i> Smart & Khuong, 1985	N92-00839	5/18/1992	Palm Beach
8D	<i>Dolichodorus profundus</i> Luc, 1960	D-3597	1/21/1976	Liberty
8K	<i>Dolichodorus pulvinus</i> Khan, Seshadri, Weischer & Mathen, 1971	N99-00145	2/17/1999	Hillsborough
8C	<i>Dolichodorus similis</i> Golden, 1958	E-0370	4/ 6/1979	Hardee
77I	<i>Geocenamus kirjanovae</i> (Sagitov, 1973) Fortuner & Luc, 1987	N99-00268	5/ 4/1999	Alachua
10ER	<i>Helicotylenchus aerolatus</i> van den Berg & Heyns, 1975	N96-01443	11/26/1999	Broward
10FC	<i>Helicotylenchus amplius</i> Anderson & Eveleigh, 1982	N87-00994	5/19/1987	Hendry
10MM	<i>Helicotylenchus apiculus</i> Roman, 1965	N98-01181	11/17/1998	Alachua
10AJ	<i>Helicotylenchus californicus</i> Sher, 1966	D-6957	7/26/1979	Lake

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
10O	<i>Helicotylenchus canadensis</i> Waseem, 1961	D-0563	4/23/1974	Dixie
10AB	<i>Helicotylenchus canalis</i> Sher, 1966	N95-01930	12/18/1995	Indian River
10AF	<i>Helicotylenchus carolinensis</i> Sher, 1966	D-1156	9/23/1974	Gadsden
10AE	<i>Helicotylenchus cavenessi</i> Sher, 1966	D-1892	3/31/1975	Hillsborough
10AQ	<i>Helicotylenchus clarkei</i> Sher, 1966	N87-01338	7/23/1987	Taylor
10FH	<i>Helicotylenchus coffeae</i> Eroshenko & Nguen Vu Thanh, 1981	N96-01292	11/ 1/1996	Alachua
10S	<i>Helicotylenchus concavus</i> Roman, 1961	D-4567	5/28/1976	Volusia
10XX	<i>Helicotylenchus crenacauda</i> Sher, 1966	E-1577	12/10/1979	Palm Beach
10C	<i>Helicotylenchus digonicus</i> Perry, in Perry Darling & Thorne, 1959	N-00545	12/ 2/1959	Jefferson
10Q	<i>Helicotylenchus dihystera</i> (Cobb, 1893) Sher, 1961	E-1409	10/19/1979	De Soto
10BB	<i>Helicotylenchus egyptiensis</i> Tarjan, 1964	D-3186	11/ 5/1975	Suwannee
10QQ	<i>Helicotylenchus elegans</i> Roman, 1965	N88-01147	6/ 8/1988	Alachua
10B	<i>Helicotylenchus erythrinae</i> (Zimmerman, 1904) Golden, 1956	H-0010	11/14/1957	Jefferson
10AH	<i>Helicotylenchus exallus</i> Sher, 1966	N92-02002	12/ 9/1992	Broward
10EL	<i>Helicotylenchus graminophilus</i> Fotedar & Mahajan, 1974	N96-00856	12/18/1996	Alachua
10AI	<i>Helicotylenchus hydrophilus</i> Sher, 1966	D-1160	9/23/1974	Gadsden
10AP	<i>Helicotylenchus labiodiscinus</i> Sher, 1966	N93-00323	3/17/1993	Suwannee
10AC	<i>Helicotylenchus leiocephalus</i> Sher, 1966	N95-01306	8/14/1995	Duval
10WW	<i>Helicotylenchus lobus</i> Sher, 1966	D-1675	2/18/1975	Palm Beach
10YY	<i>Helicotylenchus longicaudatus</i> Sher, 1966	D-5440	10/29/1976	Highlands
10AG	<i>Helicotylenchus martini</i> Sher, 1966	N96-00149	2/23/1996	Alachua
10ZZ	<i>Helicotylenchus microcephalus</i> Sher, 1966	D-1675	2/18/1975	Palm Beach
10D	<i>Helicotylenchus microlobus</i> Perry, in Perry Darling & Thorne, 1959	N-05672	4/21/1959	Volusia
10E	<i>Helicotylenchus multicinctus</i> (Cobb, 1893) Golden, 1956	H-0062	3/ 4/1958	Palm Beach
10AK	<i>Helicotylenchus nigeriensis</i> Sher, 1966	N96-00389	4/ 3/1996	Alachua
10CL	<i>Helicotylenchus paraplatyurus</i> Siddiqi, 1972	N86-02209	10/13/1986	Oscaloosa
10EE	<i>Helicotylenchus paxilli</i> Yuen, 1964	B-5235	6/11/1969	Lake
10F	<i>Helicotylenchus platyurus</i> Perry in Perry, Darling & Thorne, 1959	N89-00464	2/21/1989	Lake
10R	<i>Helicotylenchus pseudorobustus</i> (Steiner, 1914) Golden, 1956	E-1335	10/17/1979	Volusia
10AD	<i>Helicotylenchus rotundicauda</i> Sher, 1966	D-8609	5/ 5/1978	St. Lucie

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
10UU	<i>Helicotylenchus tropicus</i> Roman, 1965	N98-01040	11/10/1998	Alachua
10VV	<i>Helicotylenchus truncatus</i> Roman, 1965	N96-01299	11/ 1/1996	Seminole
10BE	<i>Helicotylenchus variabilis</i> Philips, 1971	N96-01370	11/ 8/1996	Alachua
10FF	<i>Helicotylenchus varicaudatus</i> Yuen, 1964	B-9667	4/10/1973	Alachua
140A	<i>Hemicaloosia americana</i> Ray & Das, 1978	N98-00319	4/ 8/1998	Manatee
140E	<i>Hemicaloosia luci</i> Dhanachand & Jairajpuri, 1980	N99-00145	2/17/1999	Hillsborough
140D	<i>Hemicaloosia paradoxa</i> (Luc, 1958) Ray & Das 1978	D-1027	7/24/1974	Duval
11RR	<i>Hemicronemoides amurensis</i> Eroshenko & Volkova, 1986	N89-01314	5/ 9/1989	Palm Beach
11E	<i>Hemicronemoides brachyurus</i> (Loos, 1949) Chitwood & Birchfield, 1957	E-1973	2/ 7/1980	Taylor
11U	<i>Hemicronemoides brevicaudatus</i> Dasgupta, Raski & van Gundy, 1969	N85-00898	5/30/1985	Highlands
11H	<i>Hemicronemoides chitwoodi</i> Esser, 1960	O. Description	2/5/1958	Jefferson
11C	<i>Hemicronemoides cocophilus</i> (Loos, 1949) Chitwood & Birchfield, 1957	H-0010	11/14/1957	Jefferson
11G	<i>Hemicronemoides gaddi</i> (Loos, 1949) Chitwood & Birchfield, 1957	F-0727	5/1/56	Duval
11O	<i>Hemicronemoides kanayaensis</i> Nakasono & Ichinohe, 1961	N84-00140	2/ 6/1984	Polk
11J	<i>Hemicronemoides mangiferae</i> Siddiqi, 1961	E-4870	3/16/1981	Dade
11B	<i>Hemicronemoides minutus</i> Esser, 1960	O. Description	7/28/1958	Alachua
11FF	<i>Hemicronemoides nitida</i> Pinochet & Raski, 1975	N93-00605	4/30/1993	Alachua
11XX	<i>Hemicronemoides parataiwanensis</i> Decraemer & Geraert, 1992	N97-01191	12/ 3/1997	Palm Beach
11D	<i>Hemicronemoides strictathecatus</i> Esser, 1960	O. Description	2/20/1959	Monroe
11A	<i>Hemicronemoides wessoni</i> Chitwood & Birchfield, 1957	O. Description	6/21/1956	Polk
12BT	<i>Hemicycliophora belemnis</i> Germani & Luc, 1973	N97-00636	3/20/1998	St. Johns
12F	<i>Hemicycliophora brevis</i> Thorne, 1955	N96-01510	12/12/1996	Palm Beach
12CJ	<i>Hemicycliophora ekdavici</i> Darekar & Khan, 1981	N97-00856	8/ 8/1997	Highlands
12P	<i>Hemicycliophora epicharis</i> Raski, 1958	O. Description	1958	Polk
12AI	<i>Hemicycliophora epicharoides</i> Loof, 1968	N88-01418	7/27/1988	Columbia
12RR	<i>Hemicycliophora floridensis</i> (Chitwood & Birchfield, 1957) Goodey, 1963	O. Description	1956	Columbia
12CY	<i>Hemicycliophora iranica</i> Loof, 1984	N98-01038	11/10/1998	Alachua

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
12BK	Hemicyclophora iwia Brzeski, 1974	N98-00871	10/ 6/1998	Alachua
12LL	Hemicyclophora labiata Colbran, 1971	N83-00955	6/ 7/1983	Hillsborough
12BF	Hemicyclophora lutosa Loof & Heyns, 1969	N93-01151	9/ 1/1993	Collier
12N	Hemicyclophora obtusa Thorne, 1955	H-0129	3/17/1958	Alachua
12O	Hemicyclophora parvana Tarjan, 1952	O. Description	7/1952	Seminole
12A	Hemicyclophora similis Thorne, 1955	G-0650	5/10/1957	Manatee
12CZ	Hemicyclophora spinituberculata Loof, 1984	N98-01300	12/11/1998	Alachua
12BB	Hemicyclophora typica de Man, 1921	D-1002	7/15/1974	Manatee
12DD	Hemicyclophora vidua Raski, 1958	N96-00762	7/ 2/1996	Alachua
12NN	Hemicyclophora zuckermani Brzeski, 1963	D-6690	6/ 3/1977	Alachua
13W	Heterodera cyperi Golden, Rau & Cobb, 1962	O. Description	1954	Lee
13F	Heterodera fici Kirjanova, 1954	F-0668	2/ 3/1956	Orange
13H	Heterodera glycines Ichinohe, 1952	B-1358	3/ 7/1968	Escambia
13AP	Heterodera graminophila Golden & Birchfield, 1972	N88-01750	9/13/1988	Columbia
13AA	Heterodera leuceilyma Di Edwardo & Perry, 1964	O. Description	1964	Palm Beach
13S	Heterodera schachtii Schmidt, 1871	E-0775	6/26/1979	Seminole
13U	Heterodera trifolii Goffart, 1944	F-0108	2/23/1955	Hardee
36N	Hirschmanniella belli Sher, 1968	N97-00414	4/10/1997	Okeechobee
36O	Hirschmanniella caudacrena Sher, 1968	N83-00144	1/24/1983	Levy
36B	Hirschmanniella gracilis (de Man, 1880) Luc & Goodey, 1964	B-5228	7/25/1969	Alachua
36I	Hirschmanniella marina Sher, 1968	O. Description	1/24/1955	Dade
36L	Hirschmanniella microtyla Sher, 1968	O. Description	7/14/1958	Seminole
36C	Hirschmanniella oryzae (van Breda de Haan, 1902) Luc & Goodey, 1964	G-0182	10/ 6/1956	Putman
14CC	Hoplolaimus (Hoplolaimus) concaudajuvencus Golden & Minton, 1970	O. Description	11/1966	Escambia
14H	Hoplolaimus (Hoplolaimus) galeatus (Cobb, 1913) Thorne, 1935	E-1079	9/12/1979	Alachua
14WW	Hoplolaimus (Hoplolaimus) magnistylus Robbins, 1982	N96-00150	3/15/1996	Alachua
14B	Hoplolaimus (Basirolaimus) seinhorsti Luc, 1958	B-9311	1/17/1973	Escambia

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
14A	Hoplolaimus (Hoplolaimus) tylenchiformis Daday, 1905	H-0201	7/28/1958	Alachua
48G	Lobocriconema brevicaudatum (Siddiqi, 1961) De Grisse, 1967	D-8262	3/31/1978	Hillsborough
48B	Lobocriconema crassianulum (de Guiran, 1963) De Grisse & Loof, 1965	D-7093	8/22/1977	Jefferson
48N	Lobocriconema thornei Knoblock & Bird, 1978	N96-00797	10/16/1996	Alachua
132A	Longidoroides afzali (Khan, 1964) Kahn, Chawla and Saha, 1978	D-1285	10/21/1974	Alachua
15LL	Longidorus africanus Merny, 1966	N00-001230	9/28/2000	Lee
15AQ	Longidorus belloii Andres & Arias, 1988	N93-01346	10/19/1993	Pinellas
15MM	Longidorus belondioides Heyns 1966	N00-00914	7/21/2000	Palm Beach
15AK	Longidorus cylindricaudatus Kozlowska & Seinhorst, 1979	N99-00406	5/14/1999	Alachua
15A	Longidorus elongatus (de Man, 1876) Thorne & Swanger, 1936	B-7315	3/ 2/1971	Highlands
15M	Longidorus longicaudatus Siddiqi, 1962	F-00305	10/10/1955	Jefferson
15AU	Longidorus orientalis Loof, 1982	N95-00866	5/31/1995	Palm Beach
15AB	Longidorus paraelongatus Altherr, 1974	D-6239	2/17/1977	Okaloosa
15B	Longidorus sylphus Thorne, 1939	F-0684	4/ 2/1956	Duval
15EE	Longidorus tarjani Siddiqi, 1962	O. Description	3/27/1958	Polk
143A	Loofia thienemanni (Schneider, 1925) Siddiqi, 1980	D-9105	6/27/1978	De Soto
143E	Loofia uniformis (Thorne, 1955) Siddiqi, 1980	E-3582	10/27/1980	Indian River
143F	Loofia vaccinii (Reed & Jenkins, 1963) Siddiqi, 1980	N97-00981	9/10/1997	Polk
16A	Meloidodera floridensis Chitwood, Hannon & Esser, 1956	O. Description	10/12/1955	Baker
17C	Meloidogyne arenaria (Neal, 1889) Chitwood, 1949	O. Description	1888	Alachua
17Q	Meloidogyne artiellia Franklin, 1961	N86-02144	11/ 6/1986	Palm Beach
17AD	Meloidogyne cruciani Garcia-Martinez, Taylor & Smart, 1982	N86-576	3-17-1986	Alachua
17GG	Meloidogyne graminis (Sledge & Golden, 1964) Whitehead, 1968	O. Description	7/27/1962	Polk
17I	Meloidogyne hapla Chitwood, 1949	F-0127	3/21/1955	Orange

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
17AB	<i>Meloidogyne incognita</i> (Kofoid & White, 1919) Chitwood, 1949	F-0048	6/ 3/1955	Jefferson
17BL	<i>Meloidogyne javanica</i> (Treub, 1885) Chitwood, 1949	F-0127	3/21/1955	Orange
17RR	<i>Meloidogyne megatyla</i> Baldwin & Sasser, 1979	N84-00210	3/ 1/1984	Baker
17AW	<i>Meloidogyne mayaguensis</i> Rammah & Hirschmann, 1988	N01-0034	3-20-2001	Palm Beach
17BC	<i>Meloidogyne thamesi</i> (Chitwood in Chitwood, Specht & Havis, 1952) Goodey, 1963	N-0887	2/24/1960	Brevard
55Y	<i>Mesocriconema basili</i> (Jairajpuri, 1964) Loof & De Grisse, 1989	N96-01226	10/16/1996	Alachua
55AA	<i>Mesocriconema brevistylus</i> (Singh & Khera, 1976) Loof & De Grisse 1989	N88-01022	5/11/1988	Dade
55R	<i>Mesocriconema calvatum</i> (Eroshenko, 1981) Loof & De Grisse, 1989	N98-01396	1/31/1999	Alachua
55H	<i>Mesocriconema crenatum</i> (Loof, 1964) Andrassy, 1965	N98-00876	10/ 6/1998	Alachua
55JJ	<i>Mesocriconema curvatum</i> (Raski, 1952) Loof & De Grisse, 1989	G-0453	1/28/1957	Bradford
55KK	<i>Mesocriconema denoudeni</i> (De Grisse, 1967) Loof & De Grisse, 1989	D-0412	2/21/1974	Collier
55K	<i>Mesocriconema kirjanovae</i> (Andrassy, 1962) Loof & De Grisse, 1989	E-5700	10/ 2/1981	Alachua
55AB	<i>Mesocriconema oachirai</i> (Khan, Seshadri, Weischer & Mathen, 1972) Loof & De Grisse, 1989	N82-00090	10/29/1982	Hillsborough
55AC	<i>Mesocriconema obtusicaudatum</i> (Heyns, 1962) Loof & De Grisse, 1989	N88-01332	7/17/1988	Columbia
55AF	<i>Mesocriconema ornata</i> (Raski, 1958) Loof & De Grisse, 1989	H-0171	6/ 6/1958	Alachua
55BH	<i>Mesocriconema ornicauda</i> Vovlas, Inserra & Esser, 1991	O. Description	9/9/1988	Columbia
55BL	<i>Mesocriconema pelerenti</i> (Sakwe & Geraert, 1991) Brzeski, Loof & Choi, 2002	N98-00702	7/24/1998	Alachua
55I	<i>Mesocriconema pseudosolivagum</i> (De Grisse, 1964) Andrassy 1965	N99-00841	6/23/1999	Brevard
55AR	<i>Mesocriconema rustica</i> (Micoletzky, 1915) Loof & De Grisse, 1989	F-0194	8/26/1955	Pinellas
55AW	<i>Mesocriconema sphaerocephala</i> (Taylor, 1936) Loof & De Grisse, 1989	6A O. description Steiner, 1942	1942	Orange
55BF	<i>Mesocriconema xenoplax</i> (Raski, 1952) Loof & De Grisse, 1989	B-9513	2/ 9/1973	Flagler
115F	<i>Neodolichodorus obtusus</i> (Allen, 1957) Andrassy, 1976	E-0592	5/17/1979	Manatee
209C	<i>Neodolichorhynchus</i> (<i>Neodolichorhynchus</i>) <i>microphasmis</i> (Loof, 1959) Jairajpuri & Hunt 1984	N96-00460	5/22/1996	Alachua
209F	<i>Neodolichorhynchus</i> (<i>Mulkorhynchus</i>) <i>phaseoli</i> (Sethi & Swarup, 1968) Talavera & Tobar, 1997	D-1660	2/ 5/1975	Glades

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
80E	<i>Neolobocriconema aberrans</i> (Jairajapuri & Siddiqi, 1963) Choi, 1975	N96-01271	11/1/1996	Alachua
47M	<i>Nothocriconema annuliferum</i> (de Man, 1921) DeGrisse & Loof, 1965	N84-01589	12/13/1984	Taylor
101A	<i>Ogma (Seriespinula) cobbi</i> (Micoletzky, 1925) Siddiqi, 1986	E-0562	5/16/1979	Lake
101S	<i>Ogma (Ogma) decalineata</i> (Chitwood, 1957) Andrassy, 1979	O. Description	7/26/1955	Manatee
101BM	<i>Ogma (Ogma) floridense</i> Vovlas, Inserra & Esser, 1991	O. Description	9/15/1988	Taylor
101YY	<i>Ogma (Seriespinula) hungaricum</i> (Andrassy, 1962) Siddiqi, 1986	D-5580	11/15/1976	Taylor
101 J	<i>Ogma (Ogma) octangulare</i> (Cobb, 1914) Schuurmans Stekhoven & Teunissen, 1938	B-9993	8/8/1973	Dade
101AO	<i>Ogma (Ogma) serratum</i> (Kahn & Siddiqi, 1963) Siddiqi, 1986	D-8879	6/6/1978	Alachua
101AS	<i>Ogma (Seriespinula) tenuicaudatum</i> (Siddiqi, 1961) Siddiqi, 1986	B-9704	4/23/1973	Alachua
52D	<i>Paralongidorus (Siddiqia) eucalypti</i> Fisher, 1964	N94-00276	2/23/1994	Alachua
52O	<i>Paralongidorus (Siddiqia) hooperi</i> Heyns, 1966	N96-00353	3/27/1996	Manatee
52B	<i>Paralongidorus (Paralongidorus) sacchari</i> Siddiqi, Hooper & Khan, 1963	N83-00748	4/28/1983	Putman
88B	<i>Paratrichodorus acutus</i> (Bird, 1967) Siddiqi, 1973	N89-00057	1/10/1989	St. Johns
88D	<i>Paratrichodorus allius</i> (Jensen, 1963) Siddiqi, 1973	D-8245	3/9/1978	Indian River
88E	<i>Paratrichodorus anemones</i> (Loof, 1965) Siddiqi, 1973	D-7699	1/24/1978	Polk
88Y	<i>Paratrichodorus anthurii</i> Baujard & Germani, 1985	N90-01363	8/2/1990	Alachua
88F	<i>Paratrichodorus atlanticus</i> (Allen, 1957) Siddiqi, 1973	O. Description	12/6/1955	Polk
88W	<i>Paratrichodorus catharinae</i> Vermeulen & Heyns, 1983	N91-00286	2/19/1991	Columbia
88EE	<i>Paratrichodorus meyeri</i> De Waele & Kilian, 1992	N95-01290	8/24/1995	Alachua
88I	<i>Paratrichodorus minor</i> (Colbran, 1956) Siddiqi, 1973	O. Description, See Allen, 1957	7/1/1957	Seminole
88J	<i>Paratrichodorus mirzai</i> (Siddiqi, 1960) Siddiqi, 1973	D-0848	6/11/1974	Alachua
88K	<i>Paratrichodorus nanus</i> (Allen, 1957) Siddiqi, 1974	N-00448	11/19/1959	Collier
88L	<i>Paratrichodorus pachydermus</i> (Seinhorst, 1954) Siddiqi, 1973	D-6108	1/26/1977	Holmes
88M	<i>Paratrichodorus porosus</i> (Allen, 1957) Siddiqi, 1973	N-00514	11/24/1959	Palm Beach
88N	<i>Paratrichodorus renifer</i> Siddiqi, 1973	E-0536	5/17/1979	Lake

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
88O	Paratrichodorus rhodesiensis (Siddiqi & Brown, 1965) Siddiqi, 1973	D-6107	1/26/1977	Holmes
88Q	Paratrichodorus teres (Hooper 1962) Siddiqi 1973	D-1187	9/24/1974	Calhoun
19B	Paratylenchus (Gracilaculus) aciculus Brown, 1959	N88-01254	6/23/1988	Martin
19C	Paratylenchus (Gracilaculus) aculentus Brown, 1959	D-2309	6/17/1975	Sumter
19AL	Paratylenchus (Paratylenchus) alleni Raski, 1975	D-7074	8/19/1977	Alachua
19D	Paratylenchus (Paratylenchus) amblycephalus Reuver, 1959	N-00407	11/12/1959	Martin
19QQ	Paratylenchus (Paratylenchus) aquaticus Merny, 1966	B-9886	6/29/1973	Marion
19G	Paratylenchus (Paratylenchus) besoekianus Bally & Reydon, 1931	D-0401	2/15/1974	Orange
19AK	Paratylenchus (Paratylenchus) breviculus Raski, 1975	N96-00885	7/17/1996	Clay
19AM	Paratylenchus (Paratylenchus) colbrani Raski, 1975	N83-01722	11/ 1/1983	Alachua
19CL	Paratylenchus (Gracilaculus) costata (Raski, 1976) Siddiqi, 1986	N98-01106	11/10/1998	Alachua
19I	Paratylenchus (Paratylenchus) curvitatus van der Linde, 1938	N-02753	6/ 5/1961	Dade
19J	Paratylenchus (Paratylenchus) dianthus Jenkins & Taylor, 1956	N-00283	10/15/1959	Palm Beach
19K	Paratylenchus (Paratylenchus) elachistus Steiner, 1949	O. Description	12/1949	Hendry
19HH	Paratylenchus (Gracilaculus) elegans (Raski, 1962) Siddiqi & Goodey, 1964	O. Description	11/20/1955	Polk
19CM	Paratylenchus (Gracilaculus) enata (Raski, 1976) Siddiqi, 1986	N89-01597	6/ 8/1989	Pasco
19AJ	Paratylenchus (Paratylenchus) goldeni Raski, 1975	D-5354	10/13/1976	Hendry
19L	Paratylenchus (Gracilaculus) goodeyi Oostenbrink, 1953	D-0846	6/11/1974	Taylor
19M	Paratylenchus (Paratylenchus) hamatus Thorne & Allen, 1950	H-0530	4/ 4/1959	Dade
19AW	Paratylenchus (Paratylenchus) holdemani Raski, 1975	N96-00046	1/26/1996	Hernando
19CN	Paratylenchus (Gracilaculus) latescens (Raski, 1976) Siddiqi, 1986	N96-00038	1/25/1996	Alachua
19AH	Paratylenchus (Paratylenchus) leiodermis Raski, 1975	N88-01287	7/ 5/1988	Polk
19AP	Paratylenchus (Paratylenchus) leptos Raski, 1975	N88-00358	3/ 1/1988	Seminole
19R	Paratylenchus (Gracilaculus) marylandicus Jenkins, 1960	B-6176	3/ 2/1970	Lake
19O	Paratylenchus (Paratylenchus) microdorus Andrassy, 1959	D-0254	12/ 5/1973	Palm Beach
19AV	Paratylenchus (Paratylenchus) mimulus Raski, 1975 (syn. of 19AU, P. salubris, for Brzeski, 1998)	N83-01659	10/10/1983	Highlands
19BR	Paratylenchus (Paratylenchus) minor Sharma, Sharma & Khan, 1986	N95-00853	5/24/1995	Clay
19U	Paratylenchus (Paratylenchus) minusculus Tarjan, 1960	O. Description	12/18/1957	Polk

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
19A	Paratylenchus (Paratylenchus) minutus Linford, Oliveira & Ishii, 1949	H-0325	1/23/1959	Monroe
19AA	Paratylenchus (Paratylenchus) nainianus Edward & Misra, 1963	O. Description	7/ 1/1975	Polk
19P	Paratylenchus (Paratylenchus) nanus Cobb, 1923	N91-02794	12/19/1999	Orange
19SS	Paratylenchus (Paratylenchus) nawadus Khan, Prasad & Mathur, 1967	N97-00909	8/20/1997	Seminole
19BY	Paratylenchus (Gracilacus) oostenbrinki Misra & Edward, 1971	N98-01066	11/ 6/1998	Alachua
19MM	Paratylenchus (Gracilacus) peperpotti (Schoemaker, 1963) Siddiqi & Goodey, 1964	D-1666	2/12/1975	Orange
19NN	Paratylenchus (Gracilacus) peraticus (Raski, 1962) Siddiqi & Goodey, 1964	N84-01231	9/12/1984	Jefferson
19AS	Paratylenchus (Paratylenchus) perlatus Raski, 1975	N93-00934	8/15/1996	Alachua
19XX	Paratylenchus (Paratylenchus) pesticus Thorne & Malek, 1968	N87-00768	4/17/1989	Polk
19BO	Paratylenchus (Gracilacus) robustus Wu, 1974	N96-00149	2/23/1996	Alachua
19AU	Paratylenchus (Paratylenchus) salubris Raski, 1975	N88-00925	4/29/1988	Brevard
19CB	Paratylenchus (Paratylenchus) sheri (Raski, 1973) Siddiqi, 1986	N96-00292	3/11/1996	Pinellas
19EE	Paratylenchus (Gracilacus) straeleni (de Coninck, 1931) Oostenbrink, 1960	D-5578	11/ 6/1976	Taylor
19BB	Paratylenchus (Paratylenchus) vandenbrandei De Grisse, 1962	D-3606	1/27/1976	Duval
19CO	Paratylenchus (Gracilacus) yokooi (Oshima & Hirata, 1983) Brzeski, 1998	N94-00297	2/24/1994	Alachua
39A	Peltamigratus (Peltamigratus) christiei (Golden & Taylor, 1956) Sher, 1964	O. Description	10/1954	Sarasota
39C	Peltamigratus (Peltamigratus) holdemani Sher, 1964	D-7415	11/13/1977	Alachua
20AA	Pratylenchus alleni Ferris, 1961	D-3198	11/ 5/1975	Suwannee
20CG	Pratylenchus australis Valenzuela & Raski, 1985	N96-00211	3/ 6/1996	Polk
20A	Pratylenchus brachyurus (Godfrey, 1929) Filipjev & Schuurmans Stekhoven, 1941	F-0309	10/13/1955	Duval
20B	Pratylenchus coffeae (Zimmermann, 1898) Filipjev & Schuurmans Stekhoven, 1941	B-6432	5/15/1970	Polk
20C	Pratylenchus delattrei Luc, 1958	N-00036	8/10/1959	Palm Beach
20D	Pratylenchus hexincisus Taylor & Jenkins, 1957	G-0967	10/16/1957	Volusia
20W	Pratylenchus loosi Loof, 1960	N96-00546	5/ 9/1996	Hillsborough
20X	Pratylenchus neglectus (Rensch, 1924) Filipjev & Schuurmans Stekhoven, 1941	B-9160	11/16/1972	Taylor
20G	Pratylenchus penetrans (Cobb, 1917) Filipjev & Schuurmans Stekhoven, 1941	F-0684	4/ 2/1956	Duval
20Q	Pratylenchus pratensis (de Man, 1880) Filipjev, 1936	D-6115	1/27/1977	Holmes
20H	Pratylenchus scribneri Steiner in Sherbakoff & Stanley, 1943	F-0513	2/25/1956	Alachua

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
20I	<i>Pratylenchus subpenetrans</i> Taylor & Jenkins, 1957	G-0846	8/ 7/1957	Palm Beach
20U	<i>Pratylenchus thornei</i> Sher & Allen, 1953	E-1207	10/ 1/1979	Suwannee
20J	<i>Pratylenchus vulnus</i> Allen & Jensen, 1951	F-0069	6/28/1955	Orange
20K	<i>Pratylenchus zeae</i> Graham, 1951	N07780	5-3-1966	Alachua
102C	<i>Punctodera punctata</i> (Thorne, 1928) Mulvey & Stone, 1976	F-0012	3/13/1955	Polk
93C	<i>Quinisulcius acutus</i> (Allen, 1955) Siddiqi, 1971	N-00030	8/ 4/1959	Monroe
93E	<i>Quinisulcius capitatus</i> (Allen, 1955) Siddiqi, 1971	B-7761	8/12/1971	Orange
93F	<i>Quinisulcius curvus</i> (Williams, 1960) Siddiqi, 1971	D-1300	10/23/1974	Palm Beach
21A	<i>Radopholus similis</i> (Cobb, 1893) Thorne, 1949	F-0309	10/13/1955	Duval
23B	<i>Rotylenchulus parvus</i> (Williams, 1960) Sher, 1961	D-1892	3/31/1975	Hillsborough
23A	<i>Rotylenchulus reniformis</i> Linford & Oliveira, 1940	E-1407	10/18/1979	Dade
22G	<i>Rotylenchus</i> (<i>Rotylenchus</i>) <i>buxophilus</i> Golden, 1956	N-00455	11/19/1959	Collier
22D	<i>Rotylenchus</i> (<i>Rotylenchus</i>) <i>goodeyi</i> Loof & Oostenbrink, 1958	N-00455	11/19/1959	Collier
22A	<i>Rotylenchus</i> (<i>Rotylenchus</i>) <i>robustus</i> (se Man, 1876) Filipjev, 1936	H-0226	10/30/1958	Suwannee
24T	<i>Scutellonema africanum</i> Smit, 1971	N95-01290	8/24/1995	Alachua
24A	<i>Scutellonema blaberum</i> (Steiner, 1937) Andrassy, 1958	F-0116	2/19/1955	Indian River
24B	<i>Scutellonema brachyurus</i> (Steiner, 1938) Andrassy, 1958	D-8094	3/ 7/1978	Dade
24C	<i>Scutellonema bradys</i> (Steiner & LeHew, 1933) Andrassy, 1958	N-00542	12/ 2/1959	Jefferson
24F	<i>Scutellonema clathricaudatum</i> Whitehead, 1959	E-5054	4/15/1981	Dade
24RR	<i>Scutellonema conicephalum</i> Sivakumar & Selvasekaran, 1982	N96-00798	10/16/1996	Alachua
24K	<i>Scutellonema grande</i> Sher, 1964	D-9295	7/21/1978	Polk
24J	<i>Scutellonema minutum</i> Sher, 1964	D-3750	2/ 2/1976	Putman
113I	<i>Scutylenchus lenorus</i> (Brown, 1956) Siddiqi 1979	H-0556	4/27/1959	Pinellas

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
68A	<i>Telotylenchus hastatus</i> (Colbran, 1960) Jairajpuri 1963	D-4599	6/ 8/1976	Lake
26D	Trichodorus aequalis Allen, 1957	D-1187	9/24/1974	Calhoun
26AL	Trichodorus beirensis Almeida, de Waele, Susana, Santos & Sturhan, 1989	N96-00306	3/12/1996	Alachua
26U	Trichodorus borneoensis Hooper, 1962	D-1761	3/13/1975	Dixie
26G	Trichodorus californicus Allen, 1957	D-3198	11/ 5/1975	Suwannee
26FF	Trichodorus cedarus Yokoo, 1964	D-5586	11/ 9/1976	Volusia
26AB	Trichodorus coomansi de Waele & Carbonell, 1982	N96-00106	2/26/1996	Santa Rosa
26S	Trichodorus cottieri Clark, 1963	N93-01061	8/10/1993	Alachua
26T	Trichodorus cylindricus Hooper, 1962	E-0646	6/ 1/1979	Alachua
26RR	Trichodorus hooperi Loof, 1973	N86-01986	10/15/1986	Jefferson
26VV	Trichodorus intermedius Rodriguez & Bell, 1978	N95-01929	5/31/1995	Alachua
26AP	Trichodorus minzi DeWaele & Cohn, 1992	N98-01300	12/11/1998	Alachua
26L	Trichodorus obscurus Allen, 1957	F-0203	9/ 6/1955	Pinellas
26DD	Trichodorus pakistanensis Siddiqi, 1962	B-5259	8/ 6/1969	Suwannee
26AJ	Trichodorus persicus de Waele & Sturhan, 1987	N97-00245	3/ 4/1997	Alachua
26N	Trichodorus primitivus (de Man, 1880) Micoletzky, 1922	N82-0417	12/ 6/1982	Polk
26C	Trichodorus proximus Allen, 1957	O. Description	11/4/1954	Hillsborough
26AF	Trichodorus rinae Vermeulen & Heyns, 1984	N95-01949	1/ 8/1996	Alachua
26I	Trichodorus similis Seinhorst, 1963	D-2112	4/22/1975	Polk
26JJ	Trichodorus sparsus Szczygiel, 1968	B-7119	11/30/1970	Duval
26OO	Trichodorus velatus Hooper, 1972	N88-01610	8/22/1988	Levy
26X	Trichodorus viruliferus Hooper, 1963	B-7843	12/13/1978	Pasco
28L	<i>Trophytlenchulus arenarius</i> (Raski, 1956) Siddiqi, 1999	B-9754	5/ 8/1973	Alachua
28A	<i>Trophytlenchulus floridensis</i> Raski, 1957	O. Description	11/20/1955	Polk
28M	<i>Trophytlenchulus okamotoi</i> (Minagawa, 1983) Siddiqi 1999	N91-00800	3/28/1991	Broward
29AE	Tylenchorhynchus agri Ferris, 1963	N89-01064	4/10/1989	Pinellas
29DX	Tylenchorhynchus annulatus (Cassidy, 1930) Golden, 1971	N83-01746	11/ 3/1983	Manatee

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Accession No. ³	Date ⁴	County
29AI	<i>Tylenchorhynchus brassicae</i> Siddiqi, 1961	D-8335	4/ 3/1978	Hillsborough
29I	<i>Tylenchorhynchus clarus</i> Allen, 1955	D-8043	2/24/1978	Lake
29A	<i>Tylenchorhynchus claytoni</i> Steiner, 1937	F-0684	4/ 2/1956	Duval
29RR	<i>Tylenchorhynchus cylindricus</i> Cobb, 1913	CIH O. description	1/ 1/1972	No listing
29AO	<i>Tylenchorhynchus elegans</i> Siddiqi, 1961	N97-00519	3/20/1998	St. Johns
29L	<i>Tylenchorhynchus eremicolus</i> Allen, 1955	D-3095	10/13/1975	St. Johns
29QQ	<i>Tylenchorhynchus ewingi</i> Hopper, 1959	N-00104	8/12/1959	Pinellas
29CW	<i>Tylenchorhynchus irregularis</i> Wu, 1969	D-8630	5/ 1/1978	Manatee
29R	<i>Tylenchorhynchus latus</i> Allen, 1955	D-2411	7/24/1975	Broward
29AR	<i>Tylenchorhynchus mashhoodi</i> Siddiqi & Basir, 1959	N85-0630	5/ 1/1985	Dade
29EE	<i>Tylenchorhynchus nudus</i> Allen, 1955	N-00599	12/17/1959	Hendry
29DG	<i>Tylenchorhynchus tarjani</i> Andrassy, 1969	D-1977	4/ 7/1975	Hillsborough
29AD	<i>Tylenchorhynchus trilineatus</i> Timm, 1963	N-07882	5/18/1966	Pasco
30G	<i>Tylenchulus graminis</i> Inserra, Vovlas, O'Bannon & Esser, 1988	O. Description	1988	Taylor
30H	<i>Tylenchulus palustris</i> Inserra, Vovlas, O'Bannon & Esser, 1988	O. Description	9/15/1988	Taylor
30A	<i>Tylenchulus semipenetrans</i> Cobb, 1913	N-00696	12/29/1959	Marion
198A	<i>Tumiota whittoni</i> (Sledge & Christie, 1962) Siddiqi, 2000	O. Description	1956	Alachua
130A	<i>Verutus volvingentis</i> Esser, 1981	O. Description	2-5-1958	Orange
51B	<i>Xenocriconemella macrodorus</i> (Taylor, 1936) De Grisse & Loof, 1965	F-0728	5/1/1956	Duval
31A	<i>Xiphinema americanum</i> Cobb, 1913	H-0201	7/28/1958	Alachua
31X	<i>Xiphinema basiri</i> Siddiqi, 1959	D-8246	3/ 9/1978	Indian River
31D	<i>Xiphinema brasiliense</i> Lordello, 1951	N-00241	9/28/1959	Putman
31B	<i>Xiphinema chambersi</i> Thorne, 1939	F-0317-D	10/21/1955	Columbia
31OO	<i>Xiphinema coxi</i> Tarjan, 1964	O. Description	1961	Brevard

PHYTOPARASITIC NEMATODES REPORTED IN FLORIDA

CODE ¹	Scientific Name and Author ²	Acession No. ³	Date ⁴	County
31CH	<i>Xiphinema diffusum</i> Lamberti & Bleve-Zacheo, 1979	N86-00218	1/30/1986	De Soto
31L	<i>Xiphinema ebriense</i> Luc, 1958	D-6500	4/23/1977	Alachua
31U	<i>Xiphinema elongatum</i> Schuurmans Stekhoven & Teunissen, 1938	N89-01206	4/27/1989	Hernando
31C	<i>Xiphinema ensiculiferum</i> (Cobb, 1893) Thorne, 1937	D-8680	5/ 4/1978	Hardee
31CM	<i>Xiphinema floridae</i> Lamberti & Bleve-Zacheo, 1979	N86-01366	6/22/1986	Flagler
31CS	<i>Xiphinema georgianum</i> Lamberti & Bleve-Zacheo, 1979	N88-00214	2/ 8/1988	Pasco
31AE	<i>Xiphinema imitator</i> Heyns, 1965	N90-00047	1/ 5/1990	Collier
31F	<i>Xiphinema insignis</i> Loos, 1949	N98-01216	11/17/1998	Lee
31CR	<i>Xiphinema intermedium</i> Lamberti & Bleve-Zacheo, 1979	N91-02531	11/ 6/1991	Duval
31O	<i>Xiphinema krugi</i> Lordello, 1955	D-0909	6/25/1974	Sarasota
31CL	<i>Xiphinema luci</i> Lamberti & Bleve-Zacheo, 1979	N87-00263	2/16/1987	Dade
31EK	<i>Xiphinema malawiense</i> Brown, Luc & Saka, 1983	N96-01499	12/11/1996	Alachua
31UU	<i>Xiphinema opisthothysteron</i> Siddiqi, 1961	N86-02210	11/10/1986	Dade
31AL	<i>Xiphinema pachtaicum</i> (Tulaganov, 1938) Kirjanova, 1951	E-01207	10/ 1/1979	Suwannee
31E	<i>Xiphinema radicicola</i> Goodey, 1936	N-00084	8/10/1959	Palm Beach
31AS	<i>Xiphinema rivesi</i> Dalmasso, 1969	N99-00730	6/29/1999	Alachua
31R	<i>Xiphinema setariae</i> Luc, 1958	O. Description See Tarjan 1964	5/4/1961	Polk
31CO	<i>Xiphinema sheri</i> Lamberti & Bleve-Zacheo, 1979	N88-01333	7/17/1988	Columbia
31CU	<i>Xiphinema tarjanense</i> Lamberti & Bleve-Zacheo, 1979	N94-00401	4/ 5/1994	Orange
31SS	<i>Xiphinema vanderlindei</i> Heyns, 1962	N93-00624	4/30/1993	Alachua